Appl. No. 10/566,245

Amdt. dated August 29, 2007

Reply to Office action of June 4, 2007

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application.

Listing of Claims:

Claims 1-11. (Canceled)

12. (Currently amended) A fuel injector comprising

a pressure booster which is supplied with fuel at high pressure from a pressure source

and having a work chamber separated from a differential pressure chamber via a booster

piston,

a switching valve which communicates with the differential pressure chamber via a

control line, the switching valve valves being operable to effect the pressure relief and

subjection to pressure of the differential pressure chamber and

a pressure chamber on the injection valve member in communication, via a pressure

chamber supply line, with a compression chamber of the pressure booster,

the switching valve being a direct-switching 3/2-way valve whose valve needle is

pressure-compensated and having both a sliding seat and a slide seal, wherein the valve

needle has a guide diameter in the valve housing that is substantially equivalent to a

diameter of the sliding seat of the valve needle.

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13. (Previously presented) The fuel injector according to claim 12, wherein the switching

valve comprises a first pressure chamber and a second pressure chamber, which can be

separated from one another by the slide seal.

14. (Previously presented) The fuel injector according to claim 12, wherein the second

pressure chamber of the switching valve can be separated from a low-pressure chamber by

means of the sliding seat.

15. (Previously presented) The fuel injector according to claim 12, wherein the valve

needle of the switching valve is embodied in one piece.

16. (Canceled)

17. (Previously presented) The fuel injector according to claim 12, wherein the valve

needle comprises a valve needle extension which is surrounded by a low-pressure chamber.

18. (Previously presented) The fuel injector according to claim 13, further comprising an

overflow line communicating with the high-pressure source via a high-pressure supply line

discharging into the first pressure chamber of the switching valve, and the control line that

subjects the differential pressure chamber of the pressure booster to pressure or pressure-

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relieves discharges into the second pressure chamber of the switching valve, and the pressure

chambers can be separated from one another or made to communicate with one another via

the slide seal in accordance with the reciprocating motion of the valve needle.

19. (Previously presented) The fuel injector according to claim 12, wherein the sliding seat

is embodied as a cone seat or a flat seat on the end of the valve needle toward the low-

pressure chamber.

20. (Previously presented) The fuel injector according to claim 15, wherein the valve

needle embodied in one piece is received in a valve housing embodied in one piece.

21. (Previously presented) The fuel injector according to claim 15, wherein the valve

needle embodied in one piece is received in a valve housing embodied in more than one

piece.

22. (Currently amended) The fuel injector according to claim 12, claim 16, wherein the

guide diameter of the valve needle is equivalent to the diameter of the slide seal.

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